

**392\* Preliminary results of motivation program for CF patients "LifeClubCF"**

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**Aims:** To increase treatment compliance and promote healthy activities among patients with CF, decrease treatment rejection and increase regular, multidisciplinary outpatient care attendance.

**Methods:** Participants of motivation program for CF patients LifeClubCF collected points for gaining body mass, conducting physical exercise, visiting the CF outpatient care, the psychologist, dietician and a physiotherapist, for regular drug intake and for reducing the number of exacerbations. After half a year a total of 28 participants returned filled in questionnaires.

**Results:** The participants stayed in the program for 9 to 18 months depending on their will. 100% of participants agreed that the program is interesting and necessary. It was possible to exchange the collected points for rewards: mobile phones, digital cameras, laptops and others. Comparing the periods before and 6 months after taking part in the program, the participants visit more regularly: physiotherapist – 12 (42.86%)/21 (75%),  $p=0.009$  and a dietician – 10 (35.71%)/16 (57.14%),  $p=0.029$ . Differences in other answers were not statistically significant. The general drug intake before and after program does not differ.

**Conclusions:** Early data suggest that patients with CF showed an interest in participating in the motivation program LifeClubCF organized by the "MATIO" Foundation in Poland and found it useful. In terms of the disease control, it resulted in increased frequency of physiotherapist and dietician consultations. Such program would be especially useful in countries where the complex CF care is yet to be developed. More detailed analysis will require further study on a bigger group.

**393 Complex CF facultative classes at the University of Medical Sciences, Poznan, Poland**

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Cystic Fibrosis knowledge questionnaires filled-in by students of the Poznan University of Medical Sciences in 2004 showed that 63 out of 105 (60%) students expressed a desire to extend their knowledge of CF. In June 2005, The Medical Faculty board of University of Medical Sciences in Poznan, Poland agreed to start CF facultative classes. A total of 40–60 students working in small groups of 4–10 people are educated each year in the CF domain.

**Aims:** Increasing the knowledge about cystic fibrosis among students of The Medical Faculty of Poznan University of Medical Sciences in Poland.

**Methods:** Special facultative classes at The Medical Faculty were organized. The lectures were given by specialists of different science institutes and covered following aspects of CF: pulmonology, gastroenterology, laryngology, genetics, adults care, psychology, nutrition, metabolic disorders, rules of CF complex care and Polish non-governmental CF activity. All students who attended facultative classes received educational materials about CF.

**Results:** During the first year of CF facultative classes 53 medical were educated in the CF field. 27 of them took part in the evaluation. The average assessment score was 8.69 in 1–10 scale. All of the lecturers received good marks in terms of preparation (5.31), clarity (5.43), and absorption (5.36) of the presented subject in 1–6 scale.

**Conclusions:** CF facultative classes are an alternative way to improve CF knowledge among medical students. Almost two years of increasing interest along with good results of the evaluation show a very positive response from the students. These classes could play an important role in the introduction of complex and multidisciplinary CF care to future medical doctors.

**394 Seroconversion after Hepatitis B (HB) and Hepatitis A (HA) vaccination in CF patients (pts)**

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**Introduction:** Chronic liver disease (CLD) is frequently present and may be fatal in CF. We studied the immune response to HA- and HB-vaccines in CF-pts because it is lower in CLD-pts.

**Patients/methods:** Blood samples of 153 CF-pts, mean age 13.5y, were tested twice (time interval 1 y) by chemiluminescent microparticle immunoassay to assess the presence of HBs-Ab and HA-IgG, and we recorded their vaccination status. Seronegative (SN) pts for HBs-Ab and/or HA-IgG were vaccinated in between tests with Engerix<sup>®</sup>, Havrix<sup>®</sup> or Twinrix<sup>®</sup>.

**Results:** 115/120 pts (95.8%) were seropositive (SP) for HBs-Ab. 59 were fully vaccinated with Engerix<sup>®</sup> or Twinrix<sup>®</sup>. 56 had no proof of vaccination but it is probable as childhood vaccination with catch up for 12y olds started in Belgium in 1999. 19 pts had CLD (9 steatosis and 10 cirrhosis). 3 pts were SP at first but SN 1 y later. 5/120 pts (4.1%) were SN twice despite full vaccination with Twinrix<sup>®</sup> or Engerix<sup>®</sup>. 2/5 non-responders had CLD (1 steatosis, 1 liver transplant (Tx)).

82/83 pts (98.7%) were SP for HA-IgG. 59 were fully vaccinated and 2 were not. For 23 pts vaccination was unknown. 18 SP pts had CLD (9 steatosis, 8 cirrhosis, 1 liver Tx). 1 SN and non CLD-pt remained SN despite full vaccination with Havrix<sup>®</sup>. At present data are incomplete for HBs-Ab and HA-IgG for 33 and 70 pts.

**Conclusions:** The immune response to HA- and HB-vaccines is comparable in CF-pts and healthy subjects. CF-pts are at risk for CLD and seroconversion must be checked after vaccination. In case of failure 1–3 extra doses can be administered to obtain seroconversion. Revaccination is unneeded after successful primary vaccination, even when Ab-numbers become undetectable with time.

**395 Genital human papillomavirus (HPV) infection and its consequences in CF lung transplant (tx) recipients**

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HPV infection may lead to significant morbidity in tx recipients by causing genital/anal warts (condyloma acuminata) as well as (pre)cancerous lesions. The objectives of this study were (1) to report on this relatively neglected phenomenon, (2) to assess the incidence/treatment of genital/anal HPV-associated lesions in CF lung tx recipients. The files of all 74 CF patients transplanted at our institution between 05/1988 and 01/2007 (38 men/36 women, median age 24±7.5, range 8–45 yrs) were retrospectively reviewed. Triple maintenance immunosuppression was administered for life. Median survival was 46.5±44.4 mos (range 0–186). 9/60 sexually active patients (15%) who survived >12 mos post-tx developed HPV-associated genital/anal lesions. There were 3 men (35, 37, 41 yrs) and 6 women (25–35 yrs). Genital/anal HPV-proven condyloma were diagnosed at 62, 90 and 97 in the men and at 14, 16, 16, 50, 53, 90 mos post-tx in the women. All underwent local treatment (cryotherapy ± laser ± topical imiquimod), 3/9 had to undergo multiple treatments under general anesthesia. One male patient presented associated high-grade anal dysplasia and 2 women moderate to high-grade cervical dysplasia; one underwent conization and the other complete hysterectomy. These retrospective data indicate that (1) genital HPV infection may cause significant morbidity in a notable number of CF lung tx patients, (2) data on treatment strategies have to be accumulated and importantly, (3) the potentially protective effects of the now available HPV vaccine(s) in adolescents before sexual activity and before tx should be rapidly evaluated in a multi-center effort.